A-8650

SERIAL No.3339

ONKYO® SERVICE MANUAL

Integrated Stereo Amplifier
MODEL A-8650

Black and Silver models

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

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ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

Continuous Power Output:	2 × 120 watts at 4 ohms, 1 kHz (DIN) 2 × 90 watts at 8 ohms, 1 kHz (DIN) 80 watts per channel, min, RMS, at 8 ohms, both channels driven from 20 Hz to 20 kHz, with no more than 0.008% Total harmonic distortion.	
Dynamic Power:	210 watts at 2 ohms, 167 watts at 4 ohms	
Total Harmonic Distortion	0.008% at rated power 0.008% at 1 watt output	
Intermodulation Distortion:	0.005% at rated power	
Damping Factor:	150 at 8 ohms (1 kHz)	
Input Sensitivity/ Impedance:	Phono (MM):	2.5 mV/50 kohms
	Phono (MC):	160 μV/130 ohms
	CD:	150 mV/30 kohms
	TUNER:	150 mV/30 kohms
	Tape Play:	150 mV/30 kohms
Output Level/Impedance:	Tape Rec:	150 mV/1.0 kohms (Phono)
Phono Overload:	Phono (MM):	180 mV RMS. at 1 kHz. 0.015% THD.
Tone Control (Vol – 20dB):	BASS:	±8 dB at 100 Hz
	TREBLE:	±8 dB at 10 kHz
High Cut:	6 kHz (6 dB/Octave) (TREBLE min.)	
Frequency Response:	CD, Tuner:	2 Hz – 50 kHz (+0, –1 dB)
RIAA Deviation:	Phono (MM):	±0.3 dB, 20 Hz – 20 kHz
Subsonic Filter (MM SUBSONIC, MC SUBSONIC):	20 Hz (–3 dB, 6 dB/Oct.)	
Signal to Noise Ratio (IHF-A):	Phono (MM):	93 dB (5.0 mV input)
	Phono (MC):	74 dB (0.5 mV input)
	CD (DIRECT):	107 dB
Muting:	–20 dB	
Power Supply:	AC220V, 50 Hz	
Dimensions (W×H×D):	435 × 157 × 391 mm 17-1/8" × 6-3/16" × 15-3/8"	
Weight:	12.5 kg, 27.6 lbs	

Specifications and features are subject to change without notice.

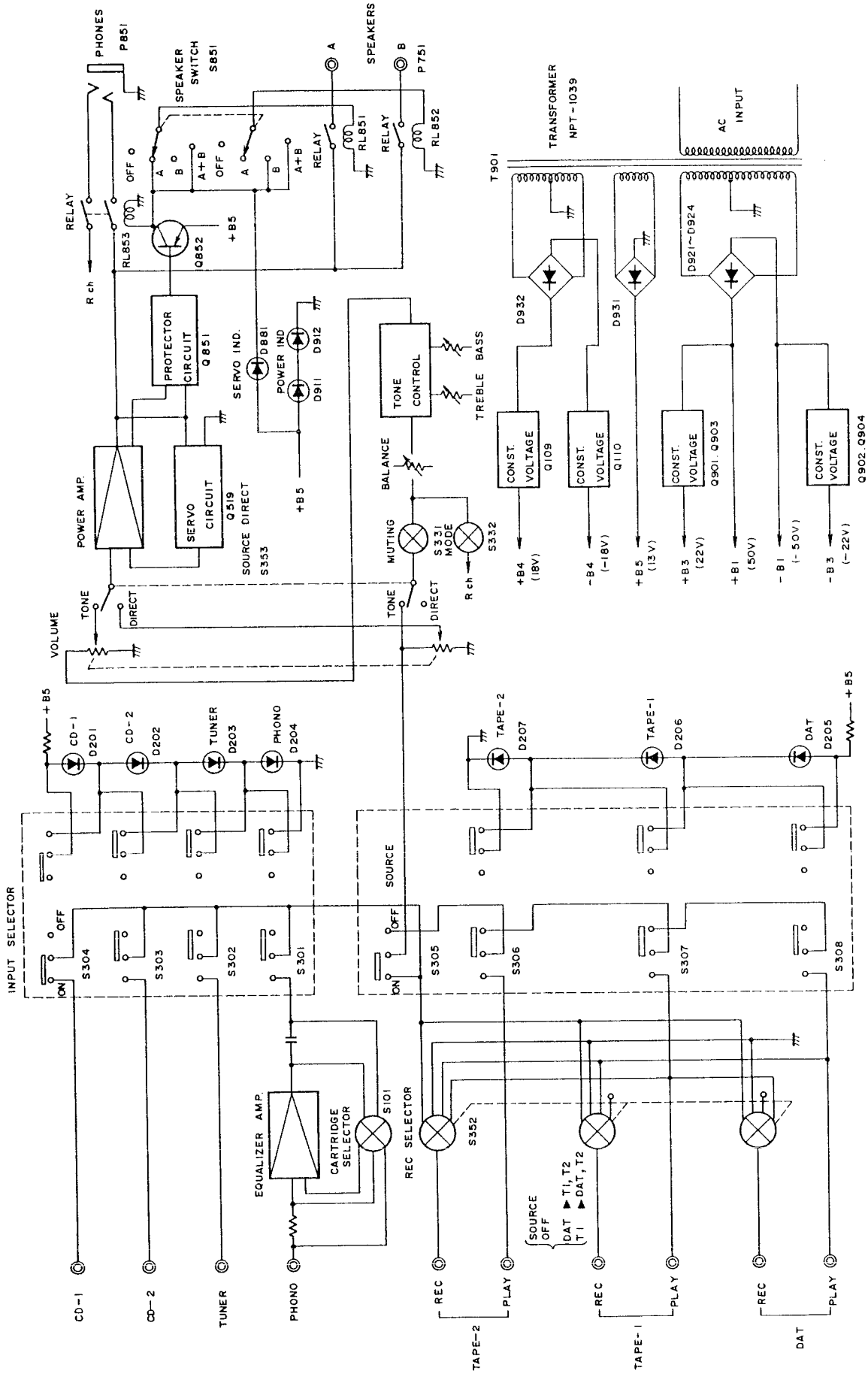
PRECAUTIONS

1. Replacing the fuses

For continued protection against risk fire, replace only with same type and same rating fuse.

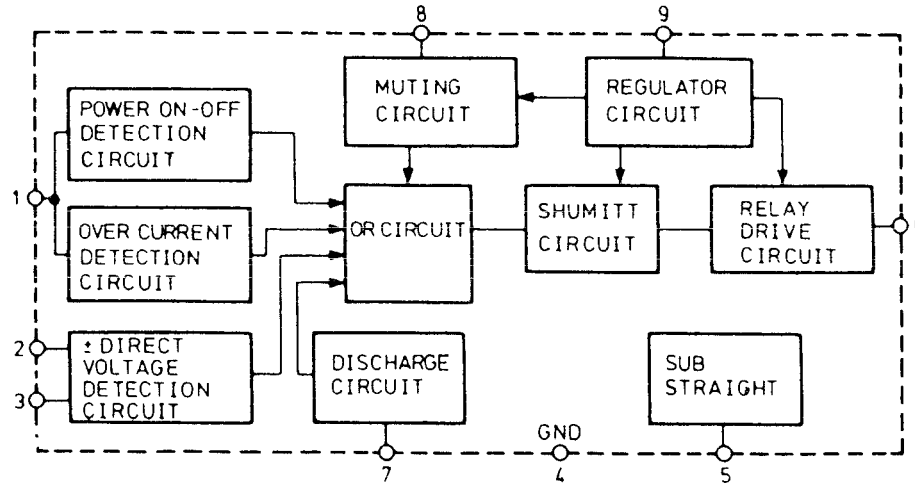
CIRCUIT NO.	PART NO.	DESCRIPTION
F902	252076 or	3.15A-SE-EAK or
	252076CC	3.15A-SE-EAK Primary fuse

BLOCK DIAGRAM

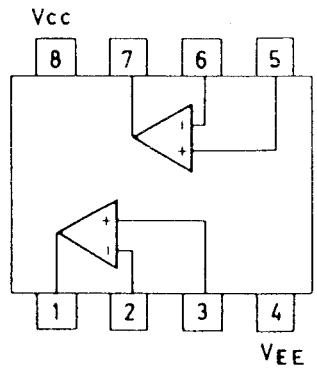


IC BLOCK DIAGRAM

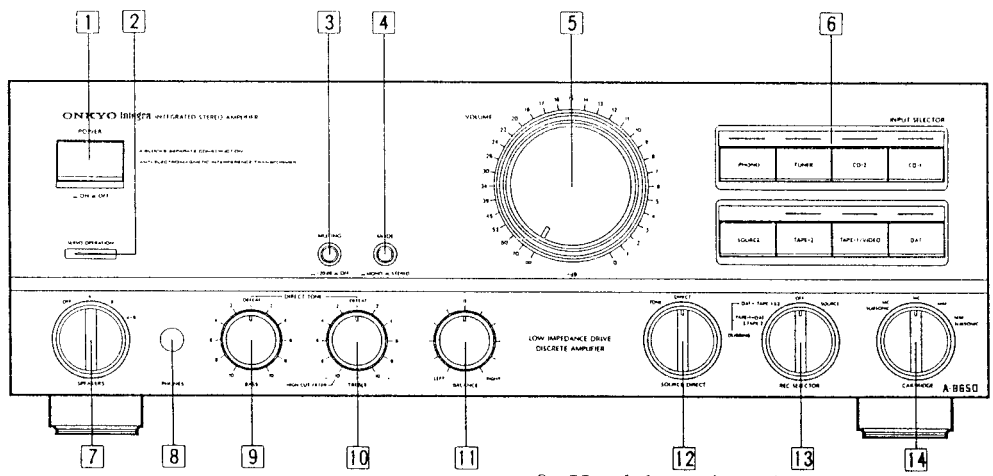
TA7317P (Protective circuit)



NJM4560DX (O.P Amp)



FRONT PANEL FACILITIES



1. Power switch (POWER)
2. Servo operation indicator (SERVO OPERATION)
3. Muting switch (MUTING)
4. Mode selector switch (MODE)
   STEREO, MONO
5. Volume control (VOLUME)
6. Input selector and Indicators (INPUT SELECTOR)
   PHONO, TUNER, CD-2, CD-1, SOURCE,
   TAPE-2, TAPE-1/VIDEO, DAT
7. Speaker selector switch (SPEAKERS)
   OFF, A, B, A+B
8. Headphone jack (PHONES)
9. Bass control (BASS)
10. Treble control (TREBLE)
11. Balance control (BALANCE)
12. Source direct switch (SOURCE DIRECT)
    TONE, DIRECT
13. Recording source selector switch (REC SELECTOR)
    TAPE-1→DAT & TAPE-2/DAT→TAPE-1 & 2
    OFF
    SOURCE (PHONO, TUNER, CD-1 or CD-2)
14. Cartridge selector switch (CARTRIDGE)
    MC SUBSONIC, MC, MM, MM SUBSONIC

ADJUSTMENT PROCEDURES

Adjustments and Checking the Protection Circuitry

1. Preparations

1) Place the unit on the workbench. (There should be about 15 mm of space between the base plate of the unit and the work surface.)
2) Set up the unit as follows.
   (1) No load
   (2) No signal
   (3) Volume turned all the way down
   (4) Speaker switch OFF
   (5) Power switch OFF

Note) Check the following points before making adjustments
   (1) The power switch should be OFF.
   (2) The interior of the unit should not be warm.

2. Idling current adjustment

1) Turn the power switch ON and allow the unit to warm up for about 10 minutes.
   (1) Adjust R535 (R635) so that the voltage at test point VCT-IID on the NAAF-3601 circuit board is 15mV±5mV.
   Note) Semi-fixed resistors enclosed in parentheses ( ) are for the right channel.

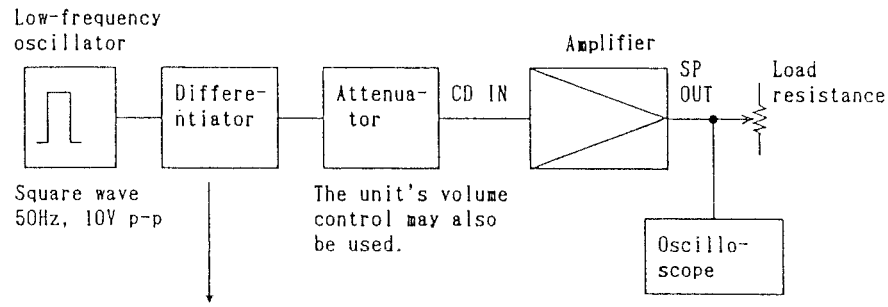
3. Check of operation of protection circuitry

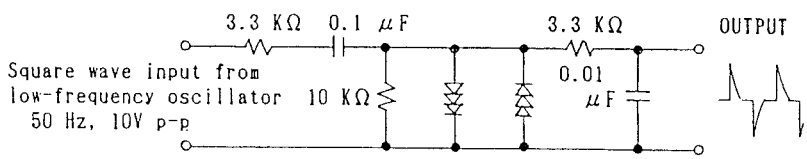
1) Check of operation of protection relay
   (1) Confirm that the relay turns ON approximately 5 seconds after the power switch is turned ON.
   (2) The SERVO indicator LED should light at the same time.
   (3) The relay should turn OFF approximately 0.5 seconds after the power switch is turned OFF.
2) Check of DC detection and servo circuitry operation
   (1) Turn the power on with no load.
   (2) After the speaker relay turns ON, apply DC+200mV to the CD input terminals. Confirm that the relay turns OFF.
   (3) Confirm that operation is the same as (2) above when an input of DC−200mV is applied.

Note) Under no circumstances connect a load or short the speaker terminals when performing the above test.

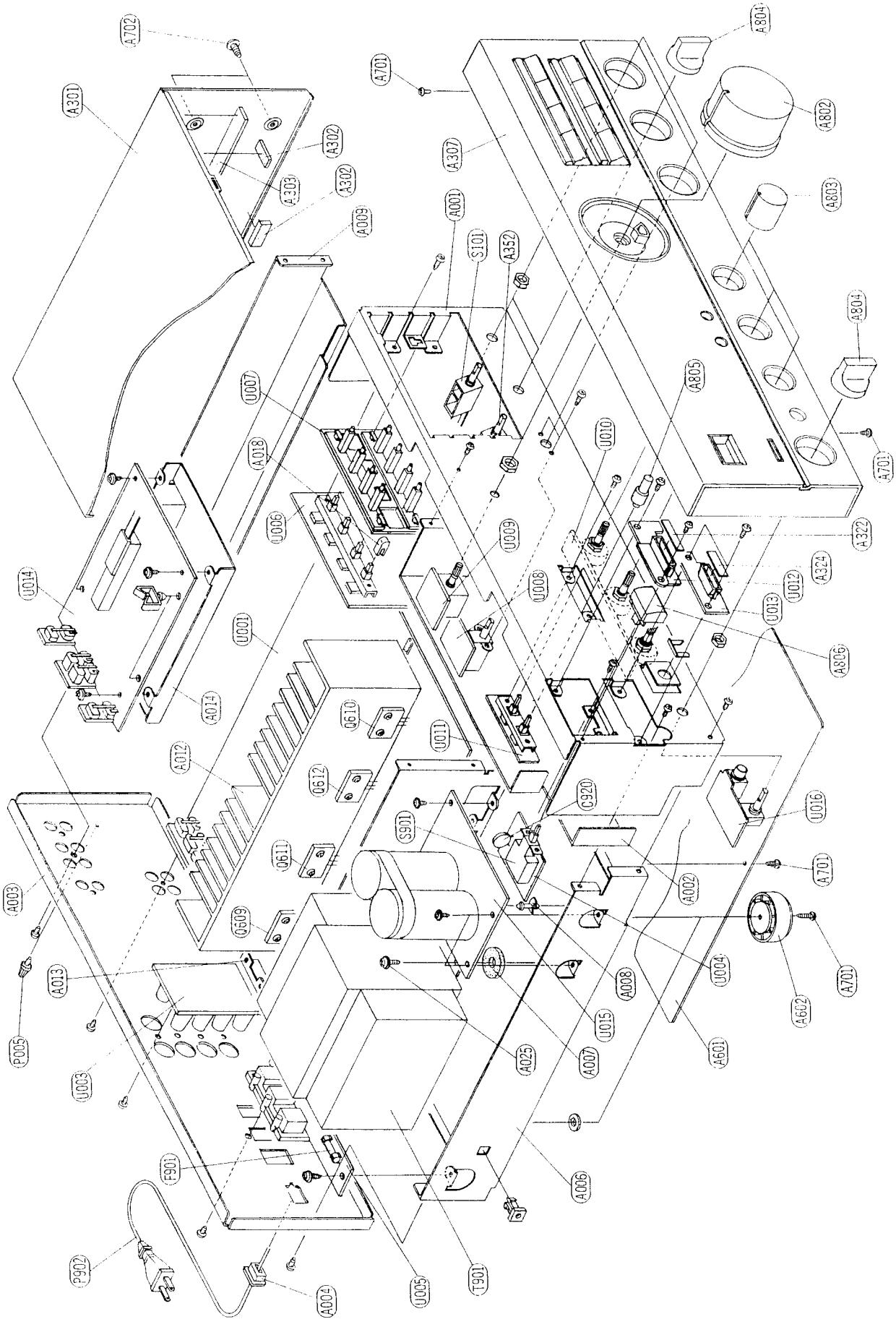
3) Signal input from the circuit illustrated below with no load.
   (1) Confirm that the speaker relay does not turn OFF even when a 2 ohm load is connected when a peak value of 30V p-p is output.
   (2) Next, confirm that when a 1 ohm load is connected the speaker relay switchse OFF and ON a couple of times and then stays OFF.

Note) The period before that relay stays OFF should not last for more than 1 minute.
Relay OFF status can be canceled by switching the power OFF.





CHASSIS-EXPLODED VIEW



CHASSIS-EXPLODED VIEW-PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
A001	27110504	FRONT BRACKET
A002	27150273	SHIELD PLATE
A003	27121272-2A	BACK PANELL
A004	27300750	BUSHING (CABLE)
A006	27130579-1B	BRACKET ASS'Y (LEFT)
	(27130579B)	BRACKET (L)
	(27190317)	HPLDER (S)
A007	27270213	SPACER (PT)
A008	27190607	KGLS-16S, HOLDER
A009	27130580-1A	BRACKET ASS'Y (RIGHT)
	(27130580A)	BRACKET (R)
	(27190717)	HOLDER (S)
A012	27160242	HEATSINK
A013	27141334	BRACKET (H)
A014	27130581	BRACKET (EQ)
A018	27273120	JOINT (S)
A025	830440109	4TTC+10CBC, TAP-TIGHT SCREW
A301	28184441A	TOP COVER [BLK]
A301	28184442A	TOP COVER [SIL]
A302	28140020	CUSHION
A303	28140695	CUSHION
A304	28140782	CUSHION
A308	1A177121	FRONT PANEL ASS'Y [BLK]
	(28125204)	END CAP (L) [BLK]
	(28125205)	END CAP (R) [BLK]
	(27265182A)	COSMETIC RING (VOL) [BLK]
	(27265185)	COSMETIC RING (TONE) [BLK]
	(27265186)	COSMETIC RING (SP) [BLK]
	(27267608)	GUIDE (PUSH) [BLK]
	(27267569A)	GUIDE (POW) [BLK]
	(28198695)	FACET (POW)
	(28198719)	FACET (MUT)
	(28323721B)	KNOB ASS'Y (SEL) [BLK]
A308	1A178121	FRONT PANEL ASS'Y [SIL]
	(28125206)	END CAP (L) [SIL]
	(28125207)	END CAP (R) [SIL]
	(27265187)	COSMETIC RING (VOL) [SIL]
	(27265188)	COSMETIC RING (TONE) [SIL]
	(27265189)	COSMETIC RING (SP) [SIL]
	(27267613)	GUIDE (PUSH) [SIL]
	(27267614)	GUIDE (POW) [SIL]
	(28323721-1B)	KNOB ASS'Y (SEL) [SIL]
A322	28199174	FILM
A324	28199181	FILM
A601	27170262B	BOTTOM BOARD
A602	27175227	BOTTOM LEG
	(28140949)	FELT
A603	28140761	CUSHION (BOTTOM BOARD)
A701	834430088	3TTS+8BBC, TAP-TIGHT
A702	838440108	4TTB+10BBC, TAP-TIGHT
A802	28323760	KNOB (VOL) [BLK]
A802	28323736	KNOB (VOL) [SIL]
A803	28323549	KNOB (TONE) [BLK]
A803	28323737	KNOB (TONE) [SIL]
A804	28323763	KNOB (SP), SCREW UP TYPE [BLK]
(A804)	28323762	KNOB (SP), INSERT TYPE [BLK]
	(27180431)	SPRING (KNOB)
A804	28323764	KNOB (SP), SCREW UP TYPE [SIL]
(A804)	28323738	KNOB (SP), INSERT TYPE [SIL]
	(27180431)	SPRING (KNOB)
A805	28323545-1	KNOB (PA) [BLK]
A805	28323739	KNOB (PA) [SIL]
A806	28323175	KNOB (POW) [BLK]
A806	28323380	KNOB (POW) [SIL]

REF. NO.	PART NO.	DESCRIPTION
Q609, Q610	2201803 or	2SC3857-O or
	2201806 or	2SC3857-P or
	2201804	2SC3857-Y, TRANSISTOR
Q611, Q612	2201793 or	2SA1493-O or
	2201796 or	2SA1493-P or
	2201794	2SA1493-Y, TRANSISTOR
⚠ T901	2300457A	NPT-1039G, POWER TRANSFORMER
S101	25030312A	NRSF-104-20BU, CARTRIDGE SWITCH
S352	25030314B	NRSF-104-20BU, REC-SELECTOR SWITCH
⚠ S901	25035550	NPS-111-L512P, POWER SWITCH
⚠ C920	3500065A	0.01μF, AC400V/125V
P005	25060044	GROUND TERMINAL
⚠ P902	253148	AS-CEE OR
	253150	AS-CEE, POWER SUPPLY CABLE
⚠ F902	252076 or	3.15A-SE-EAK or
	252076CC	3.15A-SE-EAK, FUSE
U001	1A177501-1A	NAAF-3601-1A, MAIN CIRCUIT PC BOARD ASS'Y
U003	1A177503-1A	NAETC-3603-1A, SPEAKER TERMINAL PC BOARD ASS'Y
U004	1A175504-1A	NASW-3604-1A, POWER SWITCH PC BOARD ASS'Y
U005	1A175505-1A	NAETC-3605-1A, FUSE PC BOARD ASS'Y
U006	1A175507-1	NASW-3607-1, INPUT SELECTOR SWITCH PC BOARD ASS'Y
U007	1A175508-1	NADIS-3608-1, INPUT LED PC BOARD ASS'Y
U008	1A175509-1	NASW-3609-1, SOURCE DIRECT SWITCH PC BOARD ASS'Y
U009	1A175510-1	NAAF-3610-1, VOLUME CONTROL PC BOARD ASS'Y
U010	1A175511-1	NAAF-3611-1, TONE CONTROL CIRCUIT PC BOARD ASS'Y
U011	1A175512-1	NASW-3612-1, MUTING/MODE SWITCH PC BOARD ASS'Y
U012	1A175513-1	NADIS-3613-1, POWER LED PC BOARD ASS'Y
U013	1A175514-1	NADIS-3614-1, SERVO LED PC BOARD ASS'Y
U014	1A177517-1A	NAAF-3617-1A, EQUALIZER CIRCUIT PC BOARD ASS'Y
U015	1A175520-1	NAPS-3620-1, POWER SUPPRY PC BOARD ASS'Y
U016	1A175502-1	NASW-3602-1, SPEAKER SWITCH PC BOARD ASS'Y

NOTE [BLK]: ONLY BLACK MODELS
[SIL]: ONLY SILVER MODELS

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PARTS NUMBER SPECIFIED.

PRINTED CIRCUIT BOARD PARTS LIST

MAIN CIRCUIT PC BOARD (NAAF-3601-1A)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q519, Q520	222570	NJM4560DX
Q851	222584	TA7317P
	Transistors	
Q501, Q502	2212805 or	2SK389GR or
	2212806 or	2SK389BL or
Q503~Q506	2211733 or	2SC1845E or
	2211732	2SC1845F
Q507, Q508,	2211515 or	2SA995F or
	2211516	2SA995G
Q511, Q512	2211455 or	2SA1015GR or
	2211454	2SA1015Y
Q513, Q514	2211354 or	2SA949Y or
Q603, Q604	2211353	2SA949O
Q902		
Q517, Q518	2211255 or	2SC1815GR or
	2211256	2SC1815BL
Q581~Q584	2211634 or	2SC2229Y or
Q601, Q602	2211633	2SC2229O
Q617, Q618		
Q901		
Q587, Q588	2211792 or	2SA992F or
Q619, Q620	2211793	2SA992E
Q605, Q606	2202034 or	2SD1763AD or
	2202035	2SD1763AE
Q607, Q608	2202024 or	2SB1186AD or
	2202025	2SB1186AE
Q852	2211504	2SA950Y
Q903, Q904	2211945	2SK246GR
	Diodes	
D505~D508	225251	TLR112, LED
D517~D520		
D511~D516	223163	1SS133
D851, D852		
D854		
D853	224450623	MTZ6.2C, Zener
D901, D902	224452204	MTZ22D, Zener
	Coils	
L601, L602	231134S	S-0.8E
	Capacitors	
C281~C286	373301014	100 pF, 125V Film (PP)
C501, C502	372126804	68 pF, 50V, Styrene
C509, C510	372121014	100 pF, 50V, Styrene
C511, C512	372123304	33 pF, 50V, Styrene
C513~C516	391252207	22μF, 25V, Elect. (MUSE)
C517, C518	372123304	33 pF 50V, Styrene
C523, C524	354772209	22μF, 6.3V, Elect.
C525, C526	379122235	0.022 μF, 50V, Film (DEW)
C527, C528	374794734	0.047 μF, 63V, Film (TF)
C609, C610		
C531, C532	354790479	4.7 μF, 100V, Elect.
C607, C608	374791044	0.1 μF, 63V, Film (TF)
C613~C616		
C851	354722219	220 μF, 6.3V, Elect.
C852	354742209	22μF, 16V, Elect.
C853	354784799	0.47μF, 50V, Elect.
C855	354743319	330 μF, 16V, Elect.
C901, C902	354772219	220 μF, 63V, Elect.
C903, C904	354761019	100 μF, 35V, Elect.
C905, C906	354754719	470 μF, 25V, Elect.
C911, C912	354782219	220 μF, 50V, Elect.
C934	354742219	220 μF, 16V, Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R523, R524	442520684	6.8 Ω, 1/2W Metal oxide film
R527, R528	441624734	47 kΩ, 1W, Metal oxide film
R535, R536	5210062 or	N06HR4.7KBD or
	5210216	N06HR5KBD, Semi-fixed
R581, R582	442523014	300 Ω, 1/2W, Metal oxide film
R583, R584	442523614	360 Ω, 1/2W, Metal oxide film
R601, R602	442522224	2.2kΩ, 1/2W, Metal oxide film
R603, R604	442522214	220 Ω, 1/2W, Metal oxide film
R607~R610	442520224	2.2 Ω, 1/2W, Metal oxide film
R619~R622		
R627~R630		
R615~R618	4000063	0.47Ω, 2W, Metal plate
R623~R626		
R633, R634	441720824	8.2 Ω, 2W, Metal oxide film
R645, R646	442525614	560 Ω, 1/2W, Metal oxide film
R905, R906		
R647, R648	442526224	6.2kΩ, 1/2W, Metal oxide film
R875, R876	441623914	390 Ω, 1W, Metal oxide film
R901, R902	441621304	13 Ω, 1W, Metal oxide film
	Switch	
S352a	25065367	NSS-64140, Slide
	Relay	
RL851, RL852	25065275	NRL-2P5A-DC12-38
	Terminals	
P291~P293	25045165	NPJ-4PDBL59
	Plug	
P501a	25055133	NPLG-3P117
	Socket ass'y	
P752	2009990003	NSAS-06P0007
P753	2009990004	NSAS-06P0008
	Jumper socket	
JL212	25050273	NSCT-9P101
JL315, JL951	25050267	NSCT-3P95
JL958		
JL957	25050273	NSCT-9P101
	Bracket	
	27141059	
	27300877	Plate, bus
	Clamp	
	27301186	MSA-1606, Holder clamp
	27300833	WS-2NS

SPEAKER SWITCH CIRCUIT PC BOARD (NASW-3602-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diode	
D855	223163	1SS133
	Switch	
S851	25030311A	NRSF-124-25BU
	Relay	
RL853	25065174	NRL-2P1A-DC12-09
	Stereo jack	
P851	25045164	HLJ4317-01-3020
	Shield plate	
	27150208	

SPEAKER TERMINAL PC BOARD (NAETC-3603-1A)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C751~C754	372121024	0.001 μF, 50V Styrene
	Terminal	
P751	25060138	NTM-8PDMN066

POWER SWITCH PC BOARD (NASW-3604-1A)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitor	
C920	3500065A	0.01μF, AC400V/125V, Capacitor
	Switch	
S901	25035550	NPS-111-L512P

FUSE PC BOARD (NAETC-3605-1A)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Fuse holder	
F902a	25050065	YSH403T

INPUT SELECTOR SWITCH PC BOARD (NASW-3607-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Switches	
S301, S305	25035613	NPS-442-L575
	Socket ass'y	
P102	2000557	NSAS-6P513
P311	2009990018	NSAS-6P0042
P312	2009990017	NSAS-6P0041
P314	2000896	NSAS-6P852
P953	2009990007	NSAS-16P0011
	Jumper cable	
JL212	2050014	NCS9P2E37

INPUT LED PC BOARD (NADIS-3608-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D201~D207	225137DG or	SEL2413E-DG or
	225137DY or	SEL2413E-DY or
	225137CG	SEL2413E-CG, LED
	Holder	
	27190530	Holder (LED-4)

SOURCE DIRECT SWITCH PC BOARD (NASW-3609-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Switch	
S353	25030313B	NRSF-142-20SS
	Sockets ass'y	
P501	2009990002	NSAS-08P0006
P362	2009990019	NSAS-14P0043

VOLUME CONTROL PC BOARD (NAAF-3610-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistor	
R321	5144010	N16RQM50KBT25, Variable

TONE CONTROL CIRCUIT PC BOARD (NAAF-3611-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C301~C304	374721635	0.016 μF, 50V, Film (TF)
C305, C306	374721825	1800 pF, 50V, Film (TF)
C307, C308	374728234	0.082 μF, 50V, Film (TF)
	Resistors	
R301	5148107A	N16RGMC250KMN25, Variable
R302	5142002	N16RGM11C100K25, Variable
R303	5144011	N16RQM11C70K88K25, Variable

MUTING/MODE SWITCH PC BOARD (NASW-3612-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Switch	
S331, S332	25035601	NPS-222-L565

POWER LED PC BOARD (NADIS-3613-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D911, D912	225142DX2	SEL2913K-DX2, LED
	Jumper socket	
JL955	25050267	NSCT-3P95
	Holder	
	27190678	Holder, LED

SERVO LED PC BOARD (NADIS-3614-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D881	225137DG or	SEL2413E-DG or
	225137DY or	SEL2413E-DY or
	225137CG or	SEL2413E-CG or
	225137CY	SEL2413E-CY, LED
	Holder	
	27190679	Holder, LED

EQUALIZER CIRCUIT PC BOARD (NAAF-3617-1A)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q105, Q106	222570	NJM4560D-X
Q109	222780183	78L18
Q110	222790183	79L18
	Transistors	
Q101, Q102	2211535 or 2211536	2SK146GR or 2SK146BL
	Capacitors	
C103, C104	372121024	0.001 μF, 50V, Styrene
C105, C106	372121514	150 pF, 50V, Styrene
C107, C108	372121014	100 pF, 50V, Styrene
C111, C112	379122024	2000 pF, 50V, Film (DEW)
C123, C124		
C113~C116	379122434	0.024 μF, 50V, Film (DEW)
C117, C118	379124334	0.043 μF, 50V, Film (DEW)
C119~C122	391251017	100 μF, 25V, Elect. (MUSE)
C129, C130	354780109	1 μF, 50V, Elect.
C147, C148	354764719	470 μF, 35V, Elect.
C151, C152	354754719	470 μF, 25V, Elect.
C231~C236	373301014	100 pF, 125V, film (PP)
	Resistor	
R152	442525604	56 Ω, 1/2W, Metal oxide film
	Switch	
S101	25065366	NSS-84139, Slide
	Terminals	
P101	25045180	NPJ-2PDBL70
P201	25045165	NPJ-4PDBL59
P202	25045182	NPJ-2PDBL72
	Jumper socket	
JL959	25050268	NSCT-4P96

POWER SUPPLY PC BOARD (NAPS-3620-1)-PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D921~D924	22380012	HER303F
D925, D926	22380003	1N5402F
D931, D932	22380013	RDF02M
	Capacitors	
C921, C922	3504209A	12000 μF, 63V, Elect.
C923, C924	374503345	0.33μF, 125V, Elect. (ME)
C925	374504745	0.47μF, 125V, Elect. (ME)
C931, C932	379122235	0.022 μF, 50V, Film (DEW)
C933	354744719	470 μF, 16V, Elect.
C935, C936	379121035	0.01μF, 50V, Film (DEW)
C937, C938	354764719	470 μF, 35V, Elect.
	Resistors	
R151	442525604	56 Ω, 1/2W, Metal oxide film
R923	442525104	51 Ω, 1/2W, Metal oxide film
R931	442520104	1 Ω, 1/2W, Metal oxide film
R932~R933	442522294	0.22Ω, 1/2W, Metal oxide film
	Bracket	
	27301212	Bus

PARTS LIST OF PACKING

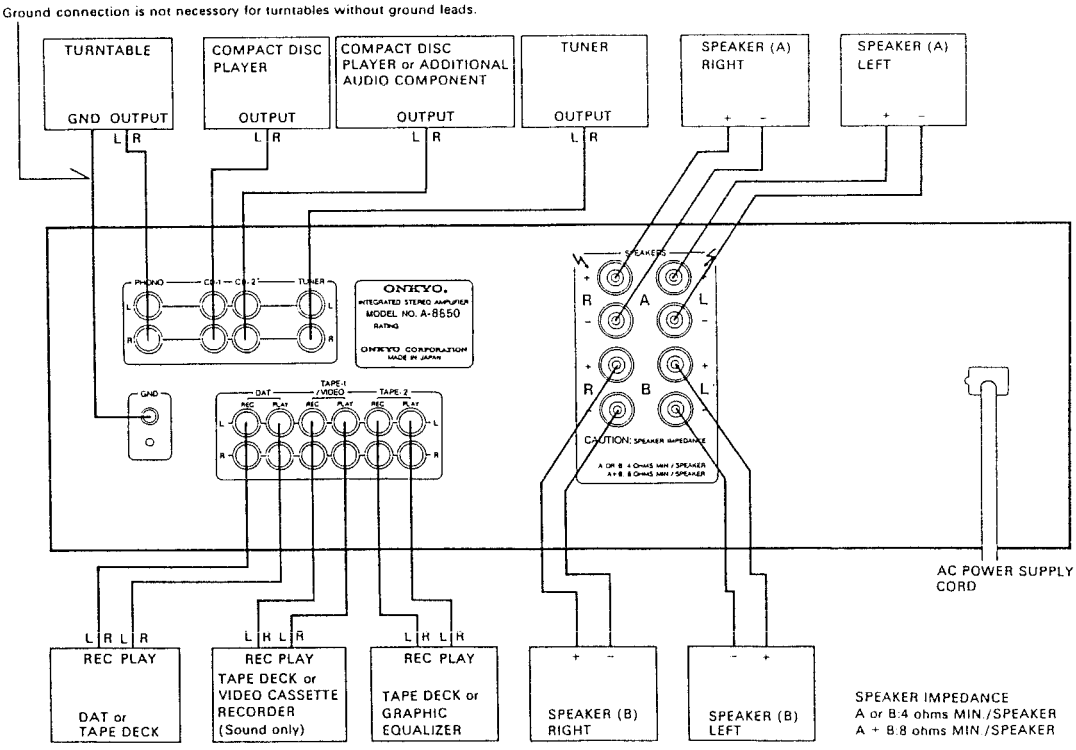
REF. NO.	PART NO.	DESCRIPTION
A851	29051934	MASTER CARTON BOX [BLK]
A851	29051935	MASTER CARTON BOX [SIL]
A852	29091125-1D	PAD, LEFT
A853	29091126-1D	PAD, RIGHT
A854	261504	PAPER TAPE
A866	29100063	500 × 750, POLY-VINYL BAG
A867	282301	SEALING HOOK
A868	260012 OR	DAMPLON TAPE (W=50) OR
	29110071-1	DAMPLON TAPE (W=50)
	29355133	CAUTION (DBP)
	ACCESSARY BAG	
	29341431	INSTRUCTION MANUAL
	29365020A	WARRANTY CARD
	29100006A	350 × 250, POLY-VINYL BAG
	29100094A	POLY-VINYL BAG (WARRANTY CARD)

NOTE [BLK]: ONLY BLACK MODELS
[SIL]: ONLY SILVER MODELS

SYSTEM CONNECTIONS

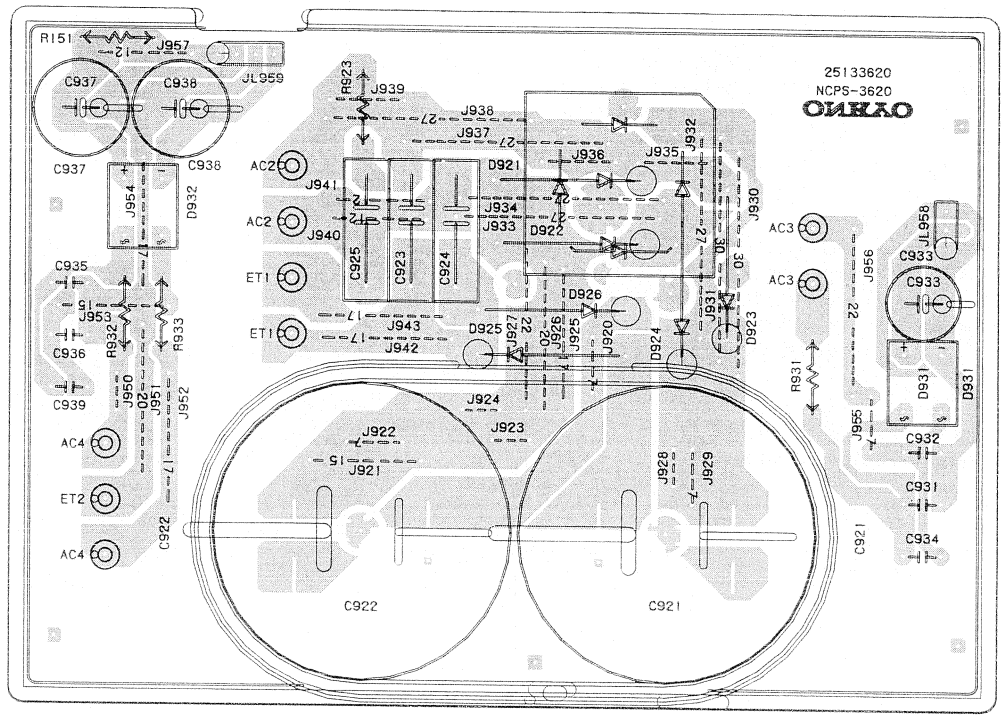
Do not plug in the power cord until all connections have been made.

Ground connection is not necessary for turntables without ground leads.



PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE

NAPS-3620-1



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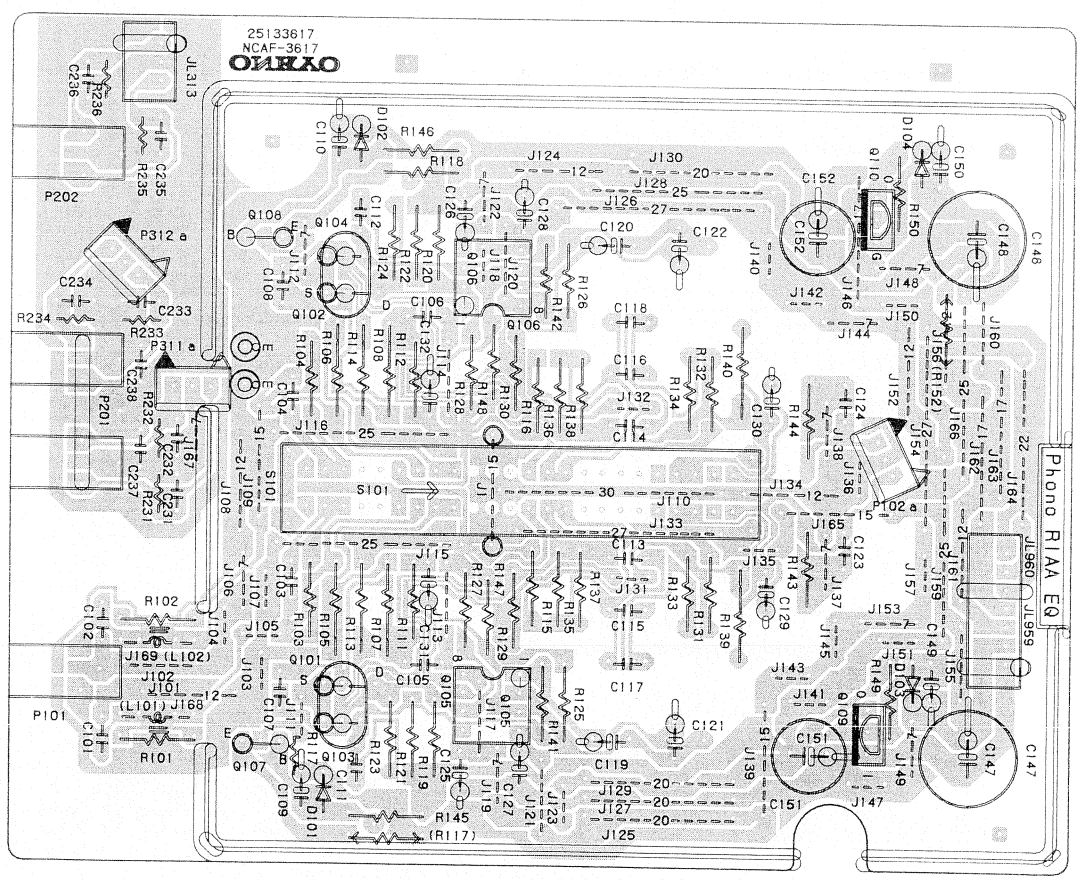

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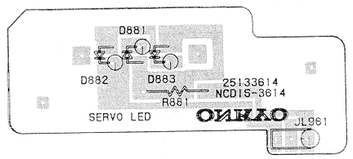

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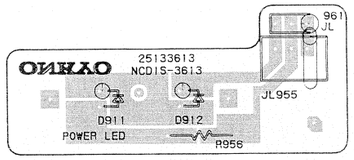

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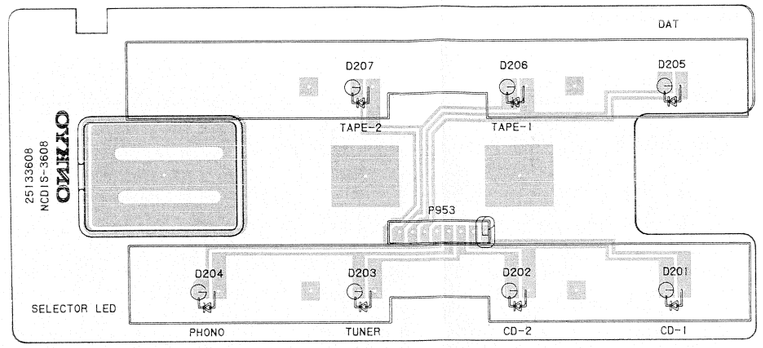

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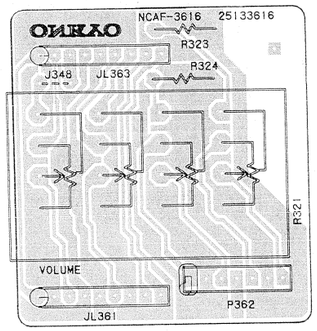

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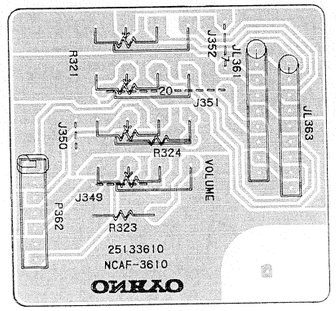

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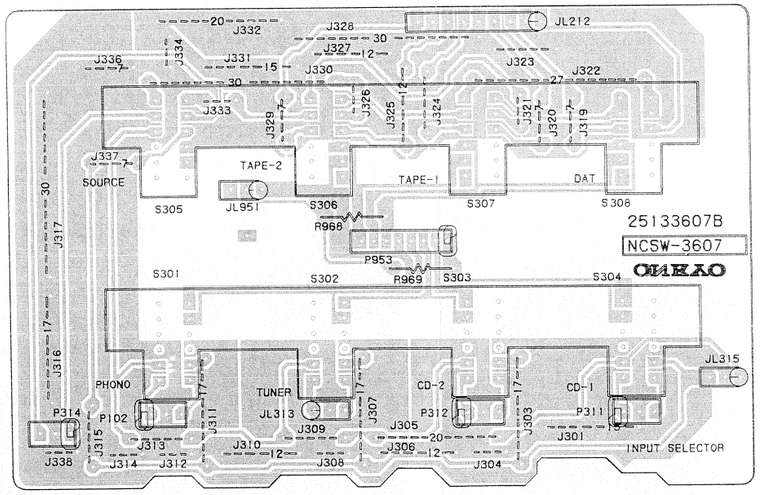

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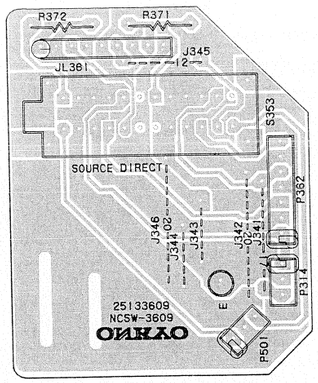

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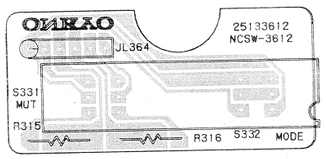

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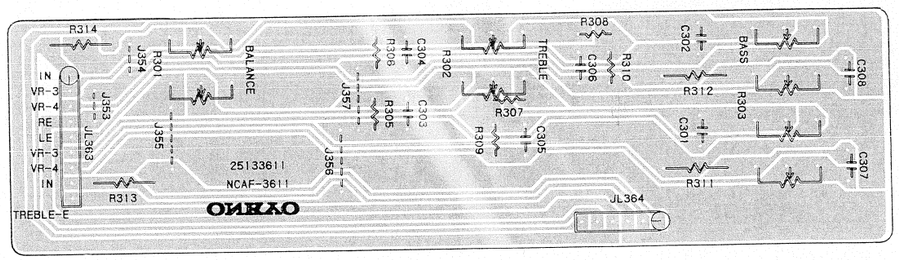

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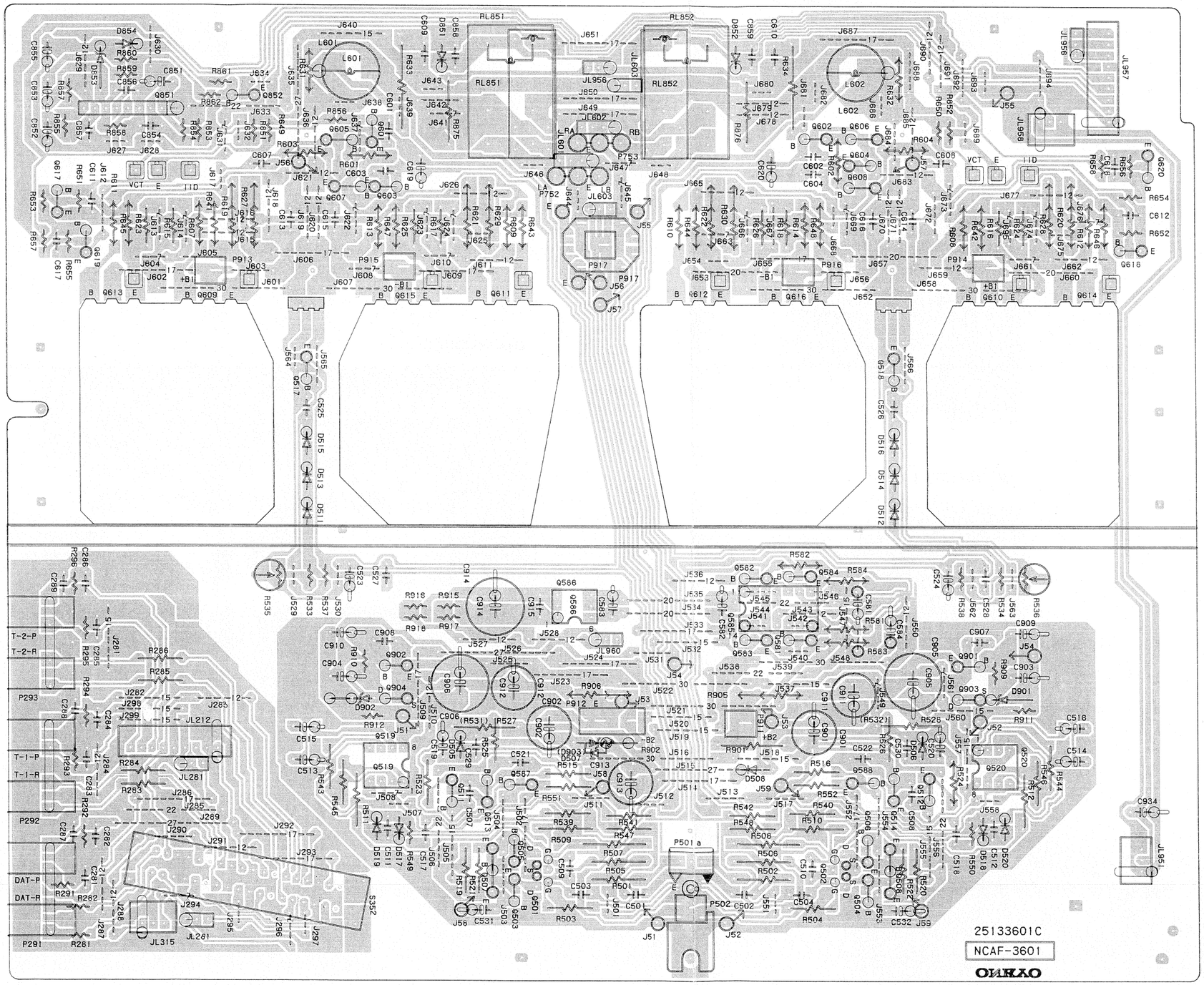
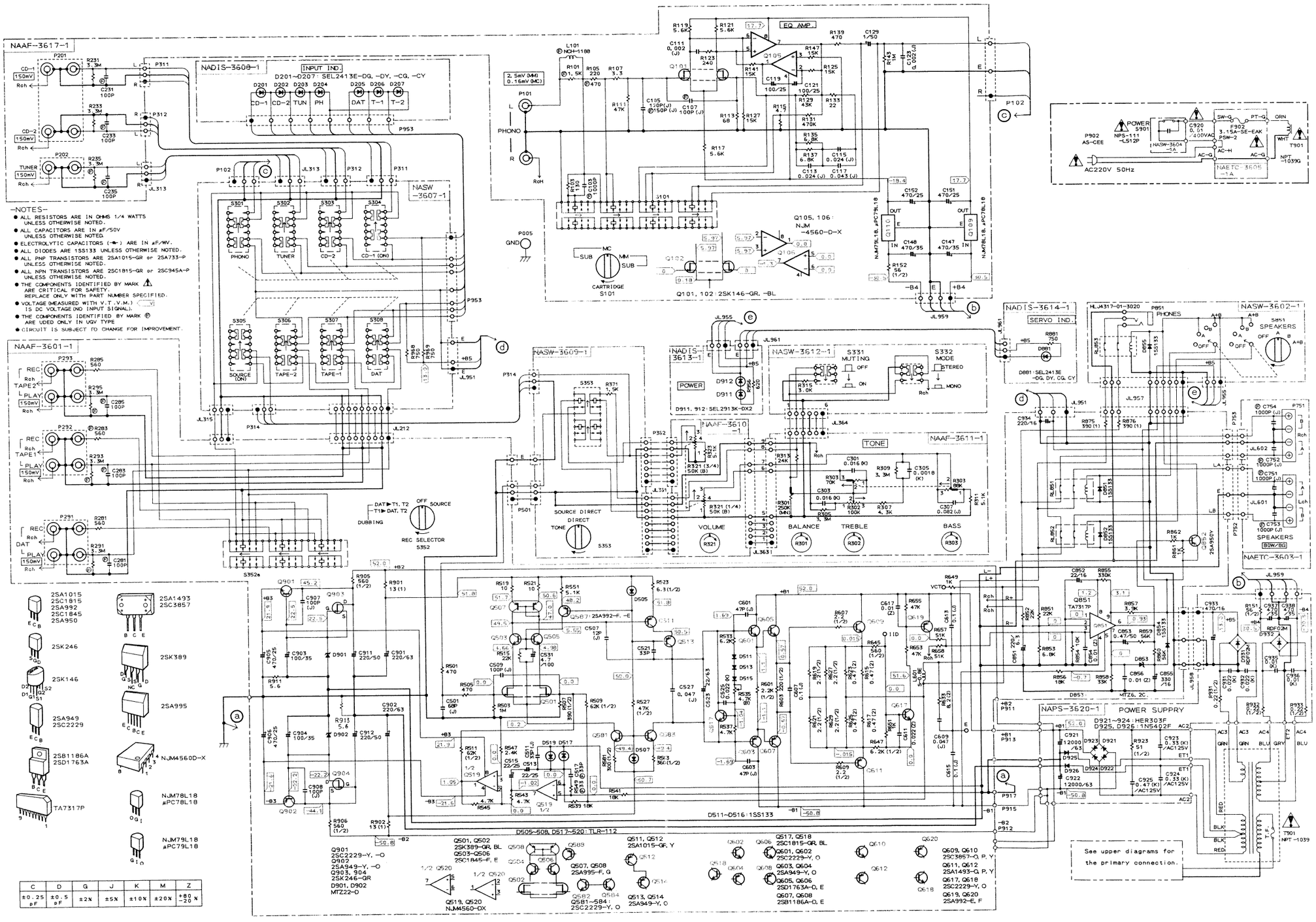


SCHEMATIC DIAGRAM



ONKYO CORPORATION

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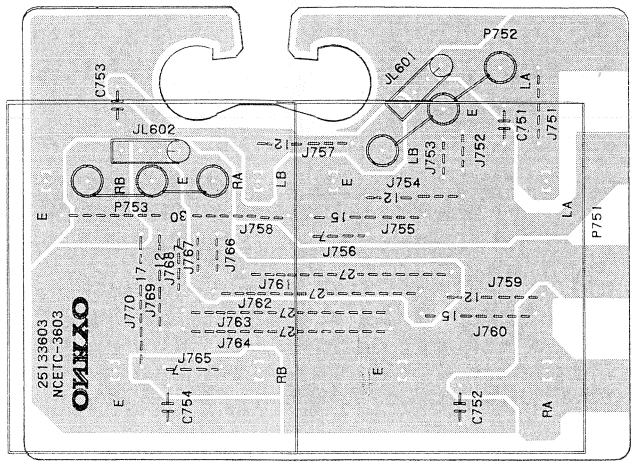

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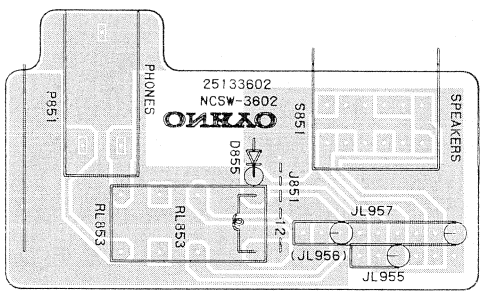

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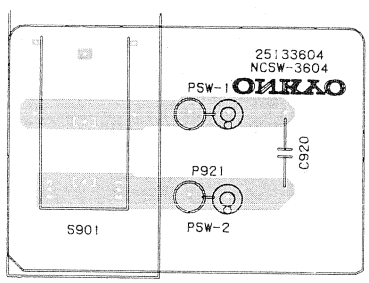

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